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Claims

1.-11. (cancelled)

12. (new) A method for limiting traffic in a packet-oriented network having a plurality of links, the method comprising:

performing an admissibility check for a group of data packets of a flow to be transmitted via the network, wherein

the admissibility check is performed on the basis of a threshold value for the traffic volume between the network ingress node and the network egress node of the flow, and wherein

the transmission of the group of data packets is not allowed if an authorization of the transmission would lead to a traffic volume exceeding the threshold value.

13. (new) The method as claimed in claim 12, wherein for all pairs of network ingress nodes and network egress nodes threshold values are defined for the traffic volume between each node pair.

14. (new) The method as claimed in claim 13, wherein the threshold values for the traffic volume between pairs of network ingress nodes and network egress nodes are placed in relation to the traffic volume on the links of the network, and wherein the threshold values for the traffic volume between network ingress nodes and network egress nodes are defined by means of values for maximum traffic volumes on the links of the network.

15. (new) The method as claimed in claim 14, further comprising:

determining the proportional traffic volume over the individual links of the network for the pairs of network ingress nodes and network egress nodes; and

placing in relation the threshold values for the traffic
volume between pairs of network ingress nodes and network
egress nodes to the traffic volume on links of the network by
using the values for the proportional traffic volume via the
individual links.

16. (new) The method as claimed in claim 12, wherein two
further admissibility checks are performed, wherein one of
these admissibility checks is performed using a threshold
value for the traffic routed via the network ingress node of
the flow, and wherein the other admissibility check is
performed using a threshold value for the traffic routed via
the network egress node of the flow.

17. (new) The method as claimed in claim 16, further
comprising:

establishing a relation between the traffic volumes
between pairs of network ingress nodes and network egress
nodes and the traffic volume on links of the network; and

determining limits for the traffic volume between the
pairs of network ingress nodes and network egress nodes and
determining threshold values for the traffic routed via the
network ingress nodes and for the traffic routed via the
network egress nodes by using values for a maximum traffic
volume on the links of the network.

18. (new) The method as claimed in claim 17, wherein
the relation between the traffic volumes between pairs of
network ingress nodes and network egress nodes and the traffic
volume on links of the network is established with the aid of
inequalities, and

an optimization method is performed for the traffic volume
on links of the network, wherein

the inequalities being used as auxiliary conditions
for the optimization, and wherein

the proportional traffic volume over the individual
links of the network being used for formulating the relation
between the traffic volumes between pairs of network ingress
nodes and network egress nodes and the traffic volume on links
of the network.

19. (new) The method as claimed in claim 12, wherein, if a
link drops out, the limits or the threshold values for the
admissibility check or admissibility checks are reset with the
condition that no packets are transmitted via the failed link.

20. (new) The method as claimed in claim 13, wherein, if a
link drops out, the limits or the threshold values for the
admissibility check or admissibility checks are reset with the
condition that no packets are transmitted via the failed link.

21. (new) The method as claimed in claim 14, wherein, if a
link drops out, the limits or the threshold values for the
admissibility check or admissibility checks are reset with the
condition that no packets are transmitted via the failed link.

22. (new) The method as claimed in claim 15, wherein, if a
link drops out, the limits or the threshold values for the
admissibility check or admissibility checks are reset with the
condition that no packets are transmitted via the failed link.

23. (new) The method as claimed in claim 16, wherein, if a
link drops out, the limits or the threshold values for the
admissibility check or admissibility checks are reset with the
condition that no packets are transmitted via the failed link.

24. (new) The method as claimed in claim 12, wherein limits or
threshold values dependent on the class of service of the
group of packets are used for at least one admissibility
check.

25. (new) The method as claimed in claim 13, wherein limits or threshold values dependent on the class of service of the group of packets are used for at least one admissibility check.

26. (new) The method as claimed in claim 14, wherein limits or threshold values dependent on the class of service of the group of packets are used for at least one admissibility check.

27. (new) The method as claimed in claim 15, wherein limits or threshold values dependent on the class of service of the group of packets are used for at least one admissibility check.

28. (new) The method as claimed in claim 16, wherein limits or threshold values dependent on the class of service of the group of packets are used for at least one admissibility check.

29. (new) The method as claimed in claim 12, further comprising:

determining limits or threshold values for each of a plurality of possible problem situations, which limits or threshold values cause the traffic volume to remain within an admissible framework even in a problem situation; and

setting the limits or threshold values to the minimum of the values for the problem situations under investigation.

30. (new) The method as claimed in claim 13, further comprising:

determining limits or threshold values for each of a plurality of possible problem situations, which limits or threshold values cause the traffic volume to remain within an admissible framework even in a problem situation; and

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setting the limits or threshold values to the minimum of the values for the problem situations under investigation.

31. (new) The method as claimed in claim 18, wherein at least one further relation is established with the aid of an inequality, which relation expresses a traffic limitation on a link of the network or on a link leading away from the network, and the optimization method is performed using a condition regarding said further relation.